UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/225,388	01/05/1999	DAVID W SMITH	2000.002500	2528

23720 7590 10/19/2005

WILLIAMS, MORGAN & AMERSON, P.C.
10333 RICHMOND, SUITE 1100
HOUSTON, TX 77042

EXAMINER	
NGUYEN, TOAN D	
ART UNIT	**PAPER NUMBER**
2665	

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/225,388	SMITH, DAVID W	
	Examiner	Art Unit	
	Toan D Nguyen	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 August 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,8-18,20-28 and 30-35* is/are rejected.

7)☒ Claim(s) *7,19 and 29* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 November 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1, 3-6, 9-10, 23-29, 31-32 and 34 are objected to because of the following informalities:

In claim 1 line 11, it is suggested to change "to a known data value;" to --- to said known data value; ---.

In claim 3 line 2, it is suggested to change "detecting a size" to --- detecting said size ---.

In claim 4 line 1, it is suggested to change "a destination address" to --- said destination address ---.

In claim 5 line 2, it is suggested to change "to a known data value" to --- to said known data value ---.

In claim 5 line 3, it is suggested to change "said converted, parallel set of data signals, and said set of data from said memory circuitry;" to --- said converted parallel set of data signals and said set of data from said memory circuitry; ---.

In claim 6 line 2, it is suggested to change "a host circuitry" to --- said host circuitry ---.

In claim 9 line 2, it is suggested to change "said host" to --- said host circuitry ---.

In claim 10 line 10, it is suggested to change "and said size of said received set of data signals;" to --- and said size of said received data signals; ---.

In claim 23 line 12, it is suggested to change "to a known data value" to --- to said known data value ---.

In claim 24 line 2, it is suggested to change "a computer" to --- said computer ---.

In claim 25 line 2, it is suggested to change "a computer" to --- said computer ---.

In claim 25 line 3, it is suggested to change "detecting a size" to --- detecting said size ---.

In claim 26 line 2, it is suggested to change "a computer" to --- said computer ---.

In claim 26 line 3, it is suggested to change "a destination address" to --- said destination address ---.

In claim 27 line 2, it is suggested to change "a computer" to --- said computer ---.

In claim 27 line 3, it is suggested to change "to a known data value" to --- to said known data value ---.

In claim 28 line 2, it is suggested to change "a computer" to --- said computer ---.

In claim 28 line 3, it is suggested to change "a host circuitry" to --- said host circuitry ---.

In claim 29 line 2, it is suggested to change "a computer" to --- said computer ---.

In claim 31 line 2, it is suggested to change "a computer" to --- said computer ---.

In claim 31 line 4, it is suggested to change "said host" to --- said host circuitry ---.

In claim 32 line 8, it is suggested to change "a host circuitry" to --- said host circuitry ---.

In claim 34 line 8, it is suggested to change "a host circuitry" to --- said host circuitry ---.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. Claims 3, 22, 25, 33 and 35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 3 line 4, recites the limitation "said serial data packet" lack clear antecedent basis.

In claim 3 line 5, recites the limitation "said received data packet" lack clear antecedent basis.

In claim 3 line 6, recites the limitation "said counter" lack clear antecedent basis.

In claim 22 line 3, recites the limitation "the access port" lack clear antecedent basis.

In claim 25 line 6, recites the limitation "said serial data packet" lack clear antecedent basis.

In claim 33 line 5, recites the limitation "said counter" lack clear antecedent basis.

In claim 35 line 5, recites the limitation "said counter" lack clear antecedent basis.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-2, 9, 23-24, 31-32 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKaughan et al. (US 5,802,305) in view of Wey et al. (US 6,098,100).

For claim 1, McKaughan et al. disclose system for remotely waking a sleeping computer in power down state by comparing incoming packet to the list of packets storing on network interface card comprising:

receiving a set of data signals from an external data source (figure 4, col. 8 lines 45-47);

decoding said received set of data signals (col. 8 lines 47-50);

extracting a destination address from said set of data signals (col. 8 lines 47-50);

comparing said destination address extracted from said data signals to a known data value (col. 8 lines 52-54);

determining whether said received data signals should be received by a host circuitry based upon said comparison of said destination address extracted from said data signals to a known data value (col. 8 lines 54-58);

generating at least one status signal alerting said host circuitry of said determination that said received data signals should be received by said host circuitry (col. 8 lines 59-64); and

waking up said host circuitry from a sleep mode upon a determination that said received set of data is addressed to said host circuitry (figure 4, col. 8 lines 59-64).

However, McKaughan et al. does not disclose detecting a size of said received set of data signals to use as a factor for decoding said data. In an analogous art, Wey et

al. disclose detecting a size of said received set of data signals to use as a factor for decoding said data (figure 2, reference step S18, col. 2 lines 35-37).

One skilled in the art would have recognized detecting a size of said received set of data signals, and would have applied Wey et al.'s detecting apparatus 1 in McKaughan et al.'s detects an incoming packet over the network. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Wey et al.'s method and apparatus for detecting a wake packet issued by a network device to a sleeping node in McKaughan et al.'s system for remotely waking a sleeping computer in power down state by comparing incoming packet to the list of packets storing on the network interface card with the motivation being to provide a detecting apparatus for detecting a wake packet in a network frame that was issued by a network device (col. 1 lines 48-50).

For claims 2 and 24, McKaughan et al. disclose set of data signal received is data packet that is in a serial data format, over a network line (col. 8 lines 45-47).

For claims 9 and 31, McKaughan et al. disclose wherein said method of waking up said host circuitry further comprises generating a status signal alerting said host that a address match has been found (figure 4, col. 59-62).

For claim 23, McKaughan et al. disclose system for remotely waking a sleeping computer in power down state by comparing incoming packet to the list of packets storing on network interface card comprising:

receiving a set of data signals from an external data source (figure 4, col. 8 lines 45-47);

decoding said received set of data signals (col. 8 lines 47-50);

extracting a destination address from said set of data signals (col. 8 lines 47-50);

comparing said destination address extracted from said data signals to a known data value (col. 8 lines 52-54);

determining whether said received data signals should be received by a host circuitry based upon said comparison of said destination address extracted from said data signals to a known data value (col. 8 lines 54-58);

generating at least one status signal alerting said host circuitry of said determination that said received data signals should be received by said host circuitry (col. 8 lines 59-64); and

waking up said host circuitry from a sleep mode upon a determination that said received set of data is addressed to said host circuitry (figure 4, col. 8 lines 59-64).

However, McKaughan et al. does not disclose detecting a size of said received set of data signals to use as a factor for decoding said data signals. In an analogous art, Wey et al. disclose detecting a size of said received set of data signals to use as a factor for decoding said data signals (figure 2, reference step S18, col. 2 lines 35-37).

One skilled in the art would have recognized detecting a size of said received set of data signals, and would have applied Wey et al.'s detecting apparatus 1 in McKaughan et al.'s detects an incoming packet over the network. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Wey et al.'s method and apparatus for detecting a wake packet issued by a network device to a sleeping node in McKaughan et al.'s system for remotely waking a sleeping

computer in power down state by comparing incoming packet to the list of packets storing on the network interface card with the motivation being to provide a detecting apparatus for detecting a wake packet in a network frame that was issued by a network device (col. 1 lines 48-50).

For claim 32, McKaughan et al. disclose system for remotely waking a sleeping computer in power down state by comparing incoming packet to the list of packets storing on network interface card comprising:

receiving a data signal (figure 4, col. 8 lines 45-47);

extracting said destination address based upon said data signal to determine whether a host circuitry is being addressed by comparing said destination address to a predetermined address; (col. 8 lines 47-54);and

waking up a host circuitry from a sleep mode based upon said determination that said host circuitry is being addressed (figure 4, col. 8 lines 59-64).

However, McKaughan et al. does not disclose detecting a size of said received set of data signals to use as a factor for extracting a destination address. In an analogous art, Wey et al. disclose detecting a size of said received set of data signals to use as a factor for extracting a destination address (figure 2, reference step S18, col. 2 lines 35-37).

One skilled in the art would have recognized detecting a size of said received set of data signals, and would have applied Wey et al.'s detecting apparatus 1 in McKaughan et al.'s detects an incoming packet over the network. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use

Wey et al.'s method and apparatus for detecting a wake packet issued by a network device to a sleeping node in McKaughan et al.'s system for remotely waking a sleeping computer in power down state by comparing incoming packet to the list of packets storing on the network interface card with the motivation being to provide a detecting apparatus for detecting a wake packet in a network frame that was issued by a network device (col. 1 lines 48-50).

For claim 34, McKaughan et al. disclose system for remotely waking a sleeping computer in power down state by comparing incoming packet to the list of packets storing on network interface card comprising:

receive a data signal (figure 4, col. 8 lines 45-47);

extract said destination address based upon said data signal to determine whether a host circuitry is being addressed by comparing said destination address to a predetermined address; (col. 8 lines 47-54);and

wake up a host circuitry from a sleep mode based upon said determination that said host circuitry is being addressed (figure 4, col. 8 lines 59-64).

However, McKaughan et al. does not disclose detect a size of said received set of data signals to use as a factor for extract a destination address. In an analogous art, Wey et al. disclose detect a size of said received set of data signals to use as a factor for extract a destination address (figure 2, reference step S18, col. 2 lines 35-37).

One skilled in the art would have recognized detecting a size of said received set of data signals, and would have applied Wey et al.'s detecting apparatus 1 in McKaughan et al.'s detects an incoming packet over the network. Therefore, it would

have been obvious to one of ordinary skill in the art at the time of the invention, to use Wey et al.'s method and apparatus for detecting a wake packet issued by a network device to a sleeping node in McKaughan et al.'s system for remotely waking a sleeping computer in power down state by comparing incoming packet to the list of packets storing on the network interface card with the motivation being to provide a detecting apparatus for detecting a wake packet in a network frame that was issued by a network device (col. 1 lines 48-50).

5. Claims 3-6, 8, 10-18, 20-22, 25-28, 30, 33 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKaughan et al. (US 5,802,305) in view of Wey et al. (US 6,098,100) further in view of Warren et al. (US 4,516,201).

As far as understood, with respect to claims 3-6, 8, 25-28, 30 and 33, McKaughan et al. do not disclose:

converting said serial data packet into a parallel data format;

extracting a word clock from said received data packet;

incrementing a member held by said counter, said word clock generating a word count;

inputting said converted parallel format data into a plurality of comparators;

using said word count to address data stored in a memory circuitry; and

inputting a set of data signals from said memory circuitry into an appropriate comparator.

In an analogous art, Warren et al. disclose:

converting said serial data packet into a parallel data format (figure 2, col. 8 lines 23-28);

extracting a word clock from said received data packet (figure 5, col. 14 lines 14-16);

incrementing a member held by said counter, said word clock generating a word count (figure 6, col. 16 lines 1-52);

inputting said converted parallel format data into a comparator (figure 8, col. 23 lines 38-68);

using said word count to address data stored in a memory circuitry (col. 23 lines 3-5); and

inputting a set of data signals from said memory circuitry into an appropriate comparator (figure 8, col. 23 lines 38-68).

Warren et al. disclose further wherein said act of extracting a destination address from said set of data signals further comprises slicing said parallel data such that at least one destination address data word is generated (col. 8 lines 23-28 as set forth in claims 4 and 26); performing a comparison function upon said converted, parallel set of data signals, and said set of data from said memory circuitry (figure 8, col. 23 lines 38-68), generating a digital comparator status signal in response of said performance of comparator function; and clocking in said digital comparator data signal into a register (figure 8, col. 23 line 27-68 as set forth in claims 5 and 27); determining whether said received data signals should be received by a host circuitry further comprises latching all output of said plurality of comparators into a digital logic circuitry (figure 2, col. 8 lines

23-28 as set forth in claims 6 and 28); performing an OR function upon all said latched output of said comparator (figure 7, col. 21 lines 33-38 as set forth in claims 8 and 30).

One skilled in the art would have recognized converting said serial data packet into a parallel data format, and would have applied Warren et al.'s serial-to-parallel converter in McKaughan et al.'s detects an incoming packet over the network. Therefore, it would have been obvious to one of ordinary skill in the art at the time invention, to use Warren et al.'s multipled data communications using a queue in a controller in McKaughan et al.'s system for remotely waking a sleeping computer in power down state by comparing incoming packet to the list of packets storing on the network interface card with the motivation being to turn its serial input into selectably 5-bit or 8-bit parallel words (col. 8 lines 25-26).

Wey et al. in view of McKaughan et al. disclose a plurality of comparators (figure 3, references 23 and 25, col. 5 lines 25-26).

One skilled in the art would have recognized a plurality of comparators, and would have applied Wey et al.'s detecting apparatus 2 in McKaughan et al.'s detects an incoming packet over the network. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Wey et al.'s method and apparatus for detecting a wake packet issued by a network device to a sleeping node in McKaughan et al.'s system for remotely waking a sleeping computer in power down state by comparing incoming packet to the list of packets storing on the network interface card with the motivation being to provide a data match signal to the counter control logic 20 whenever a match between the output of the multiplexer 222 and one of

the data bytes in the packet frame from the network device is detected thereby (col. 5 lines 47-51) and to generate a packet detected signal to be received by the corresponding node in order to wake up the corresponding node (col. 6 lines 10-14).

For claims 10-18, 20-22 and 35, McKaughan et al. disclose system for remotely waking a sleeping computer in power down state by comparing incoming packet to the list of packets storing on network interface card, comprising:

means for receiving a data signal (figure 4, col. 8 lines 45-47);

a counter (col. 6 line 43);

a host circuitry interface capable of transmitting and receiving data from a host circuitry said host circuitry enter a wake up state from a sleep mode based upon decoded address data received by said host circuitry, said decoded address data being extracted from said data signal (figure 1, col. 6 lines 26-29);

a memory circuitry (figure 2, col. 6 line 42-03);

a mask circuitry (col. 8 line 48).

McKaughan et al. does not disclose means for detecting a size of said received set of data signals. In an analogous art, Wey et al. disclose means for detecting a size of said received set of data signals (figure 2, reference step S18, col. 2 lines 35-37). Wey et al. disclose further a plurality of comparators (figure 3, references 23 and 25, col. 5 lines 25-26).

One skilled in the art would have recognized detecting a size of said received set of data signals, and would have applied Wey et al.'s detecting apparatus 1 in McKaughan et al.'s detects an incoming packet over the network. Therefore, it would

have been obvious to one of ordinary skill in the art at the time of the invention, to use Wey et al.'s method and apparatus for detecting a wake packet issued by a network device to a sleeping node in McKaughan et al.'s system for remotely waking a sleeping computer in power down state by comparing incoming packet to the list of packets storing on the network interface card with the motivation being to provide a detecting apparatus for detecting a wake packet in a network frame that was issued by a network device (col. 1 lines 48-50).

However, McKaughan et al. in view of Wey et al. do not disclose:

a data formatter;

a clock divider;

a digital logic circuitry;

a plurality of status registers and a plurality of clocked registers. In an analogous art, Warren et al. disclose:

a data formatter (figure 1, col. 6 lines 37-42);

a clock divider (col. 30 line 49);

a digital logic circuitry (figure 2, col. 8 lines 23-28);

a plurality of status registers and a plurality of clocked registers (figure 10, col. 30 lines 18-64).

Warren et al. disclose further formatter comprises of a serial to parallel converter and a data end detector that are capable of converting a serial stream of data into parallel data words and detecting an end of a data stream (figure 2, col. 8 lines 10-37 as set forth in claim 11); memory circuitry comprises of a memory element and a memory

data access logic (figure 7, col. 12 lines 20-29 as set forth in claims 13 and 14); memory data access logic is coupled with said host interface such that data can be sent to and retrieved from said memory elements (figure 2, col. 8 lines 3-24 as set forth in claims 15 and 22); and comparators are coupled with said data formatter such that said comparators receive parallel formatted data from said data formatter (figure 8, col. 23 lines 38-68 as set forth in claims 16-18 and 20-21).

One skilled in the art would have recognized a data formatter, and would have applied Warren et al.'s data formatter in McKaughan et al.'s detects an incoming packet over the network. Therefore, it would have been obvious to one of ordinary skill in the art at the time invention, to use Warren et al.'s multipled data communications using a queue in a controller in McKaughan et al.'s system for remotely waking a sleeping computer in power down state by comparing incoming packet to the list of packets storing on the network interface card with the motivation being to provide the host with status information concerning the data link, to inform the host, to take action when predetermined characters are received, to automatically generate the protocol characters required when transmitting and eliminate such characters when receiving (col. 6 lines 43-48).

Allowable Subject Matter

6. Claims 7, 19 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D Nguyen whose telephone number is 571-272-3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TN
TN

MAN U. PHAN
PRIMARY EXAMINER